WE CLAIM

1. A printhead chip for an inkjet printhead, the printhead chip comprising

a substrate; and

a plurality of nozzle arrangements positioned on the substrate, each nozzle arrangement comprising

a nozzle chamber structure that defines a nozzle chamber in which ink is received;

an ink-ejecting member that is positioned in the nozzle chamber and is displaceable in the nozzle chamber to eject ink from the nozzle chamber;

at least one actuator that is positioned on the substrate, the, or each, actuator having a working portion that is displaceable with respect to the substrate when the actuator receives a driving signal;

a sealing structure that is positioned on the substrate and is interposed between the, or each, actuator and the ink-ejecting member to inhibit a passage of ink between the ink-ejecting member and the actuator; and

a motion transmitting structure that bridges the sealing structure, the motion transmitting structure interconnecting the working portion of the actuator and the ink-ejecting member so that displacement of the working portion relative to the substrate is transmitted to the ink-ejecting member.

2. A printhead chip as claimed in claim 1, which is the product of an integrated circuit fabrication technique.

3. A printhead chip as claimed in claim 2, in which the substrate includes a silicon wafer substrate and a CMOS drive circuitry layer positioned on the wafer substrate.

4. A printhead chip as claimed in claim 3, in which the nozzle chamber structure includes nozzle chamber walls that extend from the substrate and a roof that spans the nozzle chamber walls, the roof defining an ink ejection port from which ink is ejected, in use.

5. A printhead chip as claimed in claim 4, in which the nozzle chamber walls and the roof are configured so that the nozzle chamber is substantially rectangular in plan, with the nozzle chamber walls defining a distal end wall, a proximal end wall and a pair of opposed side walls.

6. A printhead chip as claimed in claim 5, in which the sealing structure and the motion transmitting structure of each nozzle arrangement define at least part of the proximal end wall.

7. A printhead chip as claimed in claim 6, in which the motion transmitting structure of each nozzle arrangement includes an effort formation that is connected to the working portion of the actuator, a load formation that is connected to the ink-ejecting member and a lever arm formation that interconnects the effort formation and the load formation, the lever arm formation being pivotal with respect to the nozzle chamber structure so that reciprocal movement of the working portion of the actuator is accommodated by pivotal movement of the lever arm formation with the result that the ink-ejecting member is reciprocally displaced towards and away from the ink ejection port.

8. A printhead chip as claimed in claim 7, in which each nozzle arrangement includes a thermal bend actuator that includes an elongate actuator arm having a fixed end that is fixed with respect to the substrate and a working end, defined by the working portion, that is displaceable with respect to the substrate, the thermal bend actuator being configured so that, when the actuator receives a signal from the drive circuitry layer, the elongate actuator arm bends towards the substrate, the working end being fixed to the effort formation of the motion transmitting structure so that, upon such movement of the actuator arm towards the substrate, the lever arm formation pivots and the load formation acts on the ink ejection member to drive the ink ejection member towards the ink ejection port.

9. A printhead chip as claimed in claim 7, in which the lever arm formation is mounted on the nozzle chamber walls with a pair of opposed, resiliently flexible connectors.

10. An inkjet printhead that includes at least one printhead chip as claimed in claim 1.